REMARKS

Initially, it is noted that the Examiner has objected to the drawings due to the clarity and legibility thereof. Applicant submits herewith formalized drawings. As such, withdrawal of the Examiner's rejection is respectfully requested.

In addition, the Examiner has object to the disclosure due to certain informalities in the specification. Applicant has amended the specification as suggested by the Examiner. As such, withdrawal of the Examiner's objections due to the informalities is respectfully requested.

The Examiner has rejected claims 1-6 and 10-15 under 35 U.S.C. § 102(b) as being anticipated by van Lintel, U.S. Patent No. 5,224,843. In addition, claim 7 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over the van Lintel '843 patent and claims 18 and 20-23 have been rejected under 35 U.S.C. § 103 as being unpatentable over the van Lintel '843 patent in view of Connelly et al., U.S. Patent No. 6,689,100. Claims 8 and 16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the van Lintel '843 patent in view of Beebe et al., U.S. Patent No. 6,532,559 and claim 24 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over the van Lintel '843 patent in view of the Beebe et al. '559 and the Connelly et al., '100 patent. As hereinafter described, applicant has amended the claims to more particularly define the invention for which protection is sought. Reconsideration of the Examiner's rejections is respectfully requested in view of the following comments.

Claim 1 defines a microfluidic device for delivering a drug to an individual. The microfluidic device includes a reservoir for receiving the drug therein. An output needle has input end in communication with the reservoir and an output receivable within the individual. A pressure source engageable with the reservoir is also provided. The pressure source has a configuration responsive to a predetermined fluid between a first configuration and a second configuration for urging a drug from the reservoir through the output needle. As hereinafter described, none of the cited references show or suggest a pressure source movable between first and second configurations in response to a predetermined fluid.

The van Lintel '843 patent is directed to a micro pump used for an *in situ* administration of medications in which the patient wears the micro pump on their person or possibly implanted in the patient's body. The pump includes a base layer that includes inlet and outlet channels for the pump. The outlet channel is connected to a reservoir containing the liquid to be pumped. The inlet channel is connected to an injection needle or the like. A wafer is mounted to the upper surface of the base wafer and has a thickness that can be deformed by a control amount element. In the depicted embodiment, the control element is a piezoelectric disc operatively connected to an alternative voltage generator. A pumping channel is defined between the wafer and the base layer. When a voltage is applied to the piezoelectric disc, the disc flexes causing the wafer to bend inward toward the base layer. The pressure in the pumping chamber rises thereby actuating an opening in the outlet valve so as to force the medication through the outlet connector. It is noted that the van Lintel '843 patent is entirely silent as to the use of a predetermined fluid to change the configuration of the pressure source. Such a structure is entirely absent from the van Lintel '843 patent. Hence, it is believed that claim 1 defines over the cited reference and is in proper form for allowance.

Claims 2-8 depending directly or indirectly from independent claim 1 further define a microfluidic device not shown or suggested in the art. It is believed that claims 2-8 are allowable as depending from an allowable base claim and in view of the subject matter of each claim.

Referring to claim 10, the microfluidic device is defined for delivering a drug to an individual. The microfluidic device includes a body having a reservoir for receiving the drug therein and a conduit. The conduit has an input means communicating with the reservoir and an output. An output needle has an input receivable in the body to communicate with the output of the conduit and an output extending outside of the body for insertion into the individual. A pressure source is engageable with the reservoir and is responsive to a predetermined fluid for urging the drug from the reservoir through the output needle. As heretofore described with respect to independent claim 1, nothing in the van Lintel '843

patent contemplates the use of a pressure source that is responsive to a predetermined fluid to urge the drug from a reservoir of a microfluidic device. Hence, it is believed that claim 10 defines over the cited reference and is in proper form for allowance.

Claims 11-16 depend either directly or indirectly from independent claim 10 and further define a microfluidic device not shown or suggested in the art. It is believed that claims 11-16 are allowable as depending from an allowable base claim and in view of the subject matter of each claim.

Independent claim 18 defines a microfluidic device for delivering a drug to an individual. The microfluidic device includes a body defining a reservoir for receiving a drug and an output needle having an input in communication with the reservoir and an output receivable within the individual. An adhesive is provided for affixing the body to the individual. The microfluidic device also has a pressure source that includes an hydrogel member expandable in response to exposure to a predetermined physical property. The hydrogel member is engageable with the reservoir and urges the drug from the reservoir through the output needle as the hydrogel member expands. Again, as heretofore described with respect to independent claims 1 and 10, nothing in the van Lintel '843 patent shows or suggests a microfluidic device that incorporates a pressure source that expands in response to exposure to a predetermined physical property. Further, the cited reference does not suggest a use of a hydrogel member as a part of the pressure source. Such a structure is entirely absent from the cited reference. As a result, applicant believes that independent claim 18 defines over the cited reference and is in proper form for allowance.

Claims 20-24 depend either directly or indirectly from independent claim 18 and further define a microfluidic device not shown or suggested in the prior art. It is believed that claims 20-24 are allowable as depending on an allowable base claim and in view of the subject matter of each claim and in view of the subject matter of each claim.

Applicant believes that the present application with claims 1-8, 10-16, 18 and 20-24 is in proper form for allowance and such action is earnestly solicited. Applicant believes that there are no fees associated with this Amendment. However, the Director is hereby authorized to charge payment of any other fees associated with this communication or credit any overpayment to Deposit Account No. 50-1170.

Respectfully submitted,

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